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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,288	08/30/2001	Michael Foley	05125.0001U1/EMC 99-048	1888
7590	06/29/2005		EXAMINER TIV, BACKHEAN	
Lawrence D. Maxwell, Esq. NEEDLE & ROSENBERG, P.C. The Candler Building, Suite 1200 127 Peachtree Street Atlanta, GA 30303-1811			ART UNIT 2151	PAPER NUMBER

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,288

Applicant(s)

FOLEY ET AL.

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/1/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Claims 1-21 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,3,12,13,14,17,18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2001/0047460 issued to Kobayashi et al.(Kobayashi) in view of US Patent 6,810,478 issued to Anand et al.(Anand) in further view US Publication 2002/0059263 issued to Shima et al.(Shima).

As per claim 1, 12,17, Kobayashi teaches a method for adding a host computer to a storage-area network having a data storage system on which are stored a plurality of configurations(Fig.1), comprising:

receiving an identifier transmitted by the host computer via the network(Abstract);
providing the host access to a storage device on which the operating system is stored(Abstract);

a switch coupled to each host computer and having a plurality of ports, each port coupled to the storage system(Fig.1).

Kobayashi however, does not explicitly teach physically connecting the diskless host computer to the network; looking up a configuration corresponding to the received

identifier, each configuration including an operating system different from the operating system of all other configurations of the plurality of configurations; the host booting from the operating system stored on the storage device.

Anand teaches physically connecting the diskless host computer to the network (col.1, lines 27-30, fig.1); looking up a configuration(Abstract, col.5, lines 44-47); the host booting from the operating system stored on the storage device(Abstract).

Therefore it would have been obvious to one ordinary skilled in the art at the time of the invention to modify the teachings of Kobayashi to explicitly add physically connecting the diskless host computer to the network, looking up a configuration, the host booting from the operating system stored on the storage device as taught by Anand to look up configuration based on an identifier in order boot multiple systems over a network(Anand, col.1, lines 9-13).

One ordinary skilled in the art at the time of the invention would have been motivated to combine the teachings of Kobayashi, and Anand in order boot different computers on the network from a server(Kobayashi, col.1, lines 10-13).

Kobayashi in view of Anand does not explicitly teach different configuration or OS systems.

Shima teaches different OS systems(Abstract).

Therefore it would have been obvious to one ordinary skilled in the art at the time of the invention to modify the teachings of Kobayashi in view of Anand to have different OS systems as taught by Shima in order to manage data in storage device without the concern of what type of operating system is used(Shima, paragraph 0010).

One ordinary skilled in the art at the time of the invention would have been motivated to combine the teachings of Kobayashi, Anand and Shima in order to provide a system where files can be accessed on different computers with different OS systems(Shima, paragraph 0006).

As per claim 2, 13, 18, providing the host access to a storage device, copying the operating ystme to the storage device from another device of the storage system(Kobayashi, Abstract, Anand, col.5, lines 44-47, Shima, Abstract).

One ordinary skilled in the art at the time of the invention would have been motivated to combine Kobayashi, and Anand and Shima and copy an OS from one device to another to provide a method in order for computers to boot from a server.

As per claim 3,14,19, wherein the step of receiving an identifier comprises a Fibre Channel switch receiving a World Wide Name (WWN) from the host in accordance with a Fibre Channel log-in protocol(Kobayashi, Fig.1, 3, Anand, Fig.1, 4).

Claims 4,5,6,7,8,9,10,15,20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2001/0047460 issued to Kobayashi et al.(Kobayashi) in view of US Patent 6,810,478 issued to Anand et al.(Anand) in further view US Publication 2002/0059263 issued to Shima et al.(Shima) in further view of US Publication 2002/0162010 issued to Allen et al.(Allen).

Kobayashi in view of Anand in further view of Shima teaches all the limitations of claims 1,12,17 however does not explicitly teach as per claim 4,15,20, wherein the step of looking up a configuration comprises: a control station computer querying the Fibre

Channel switch for the WWN; and the control station looking up the configuration in a database in response to the WWN, each WWN having a corresponding configuration.

Allen teaches wherein the step of looking up a configuration comprises: a control station computer querying the Fibre Channel switch for the WWN(Fig.3, Fig.4); and the control station looking up the configuration in a database in response to the WWN, each WWN having a corresponding configuration(paragraph 28,49,53).

Therefore it would have been obvious at the time of the invention to modify the teachings of Kobayashi in view of Anand in further view of Shima to query the Fibre Channel for the WWN and to look up configuration in a database in response to the WWN as taught by Allen in order to keep track of devices that are connected to the Fibre Channel(Allen, paragraph 0003).

One ordinary skilled in the art at the time of the invention would have been motivated to combine the teachings of Kobayashi, Anand, Shima, and Allen in order to provide a system to uniquely identify devices on the network and determine their configuration for communication(Allen, paragraph 23, 28).

As per claim 5, the method claimed in claim 4, wherein the control station queries the Fibre Channel switch in response to a notification received from the host via an Internet Protocol (IP) network(Anand, col.1, lines 48).

Therefore it would have been obvious to one ordinary skilled in the art at the time of the invention to modify the teachings of Kobayashi, Anand, Shima, and Allen and use an IP network as taught by Anand to provide an address across a computer network to another device.

One ordinary skilled in the art at the time of the invention would have been motivated to combine the teachings of Kobayashi, Anand, Shima, and Allen in order to provide a system where a device can detect another device through a network address.

As per claim 6, the method claimed in claim 5, wherein the host connects to the IP network using a DHCP protocol(Anand, Fig.4). Motivation to combine set forth in claim 5.

As per claim 7, the method claimed in claim 1, wherein the step of providing the host access to the storage device comprises establishing a connection through a switch(Allen, Fig.2). Motivation to combine set forth in claim 4.

As per claim 8, the method claimed in claim 7, wherein the switch is a Fibre Channel switch(Allen, Fig.2).Motivation to combine set forth in claim 4.

As per claim 9, wherein the step of receiving an identifier comprises a Fibre Channel switch receiving a World Wide Name (WWN) from the host in accordance with a Fibre Channel log-in protocol(Kobayashi, Fig.1, 3, Anand, Fig.1, 4). Motivation to combine set forth in claim 4.

As per claim 10,21, recites the combination to claims 4 and 5, therefore is rejected based on the same rationale as claims 4 and 5(see claim 4 and 5 above).

Claims 11, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2001/0047460 issued to Kobayashi et al.(Kobayashi) in view of US Patent 6,810,478 issued to Anand et al.(Anand) in further view US Publication

2002/0059263 issued to Shima et al.(Shima) in further view of US Publication
2002/0162010 issued to Allen et al.(Allen) in further view of US Patent 6,343,287 issued
to Kumar et al.(Kumar).

Kobayashi in view of Anand in further view of Shima in further view of Allen
teaches all the limitations of claim 10, and 12, however does not teach as per claim
11,16, wherein the database uses the lightweight directory access protocol (LDAP).

Kumar teaches the use of LDAP for a database(Fig.3).

Therefore it would have been obvious at the time of the invention to one ordinary
skilled in the art to modify Kobayashi in view of Anand in further view of Shima in further
view of Allen to use LDAP for a database as taught by Kumar in order to comb through
data to find a particular piece of information.

One ordinary skilled in the art at the time of the invention would have been
motivated to combine the teachings of Kobayashi, Anand, Shima, Allen, and Kumar in
order to provide a system to us a network protocol designed to work on TCP/IP stacks
to extract information.

Conclusion


The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Backhean Tiv whose telephone number is (571)272-
3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M.
Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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2151
6/22/05


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER